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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/082,715 | 02/25/2002 | Francis M. Creighton | 5236-000313 | 5857 |

7590 01/14/2005
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| EXAMINER |
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DONOVAN, LINCOLN D

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| ART UNIT | PAPER NUMBER |
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2832

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,715

Applicant(s)

CREIGHTON, FRANCIS M.

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,9,10 and 31-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9,10 and 31-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5, 6 and 41-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leupold.

Regarding claims 1-2, 5, 6 and 41, Leupold discloses a permanent magnet assembly [30], formed of a plurality of permanent magnets, in which the magnetization direction varies in three dimensions with location to optimize a desired magnetic field [51] property in a selected direction at a selected direction at a selected point [column 3, line 3-column 4 line 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made in order to provide a useful function for the magnetic field, that the field is "desired" within three dimensions at a selected point in a selected direction thereat.

Regarding claims 42-51, Leupold discloses the claimed invention except for the specific optimization, magnetic strength, field strength and magnetization direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the specific optimization, magnetic strength, field strength and magnetization direction, since it has been held that discovering an optimum value of a

result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 9-10 and 31-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manwaring et al. in view of Leupold

Regarding claims 9-10, Manwaring et al. disclose a magnet assembly [32, 34] in which the magnetization direction varies in three dimensions with location to project a magnetic field into a patient for moving a magnetic medical element therein [column 4, lines 24-34].

Manwaring et al. disclose the instant claimed invention except for the magnet assembly being a permanent magnet assembly.

Leupold discloses a permanent magnet assembly [30] in which the magnetization direction varies in three dimensions with location to optimize a desired magnetic field [51] property in a selected direction at a selected direction at a selected point [column 3, line 3-column 4 line 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use permanent magnets instead of the electromagnets for the magnetic field of Manwaring et al., as suggested by Leupold, in order to enhance control, tuning and stability of the magnetic field.

Regarding claims 31-51, Manwaring et al. in view of Leupold disclose the claimed invention except for the specific optimization, magnetic strength, field strength, field properties, number of magnet elements and magnetization direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made

to vary the specific optimization, magnetic strength, field strength, field properties, number of magnet elements and magnetization direction, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

Applicant's arguments filed 11-08-04 have been fully considered but they are not persuasive. Applicant argues that Leupold [US 5,523,732] fails to "teach tuning various flux sources to optimize a magnetic field property at a selected operating point, as required by the claims, nor is there any teaching that various flux sources ever were tuned to optimize a magnetic field property at a selected operating point." Examiner disagrees. Leupold teaches, column 3, lines 33-58, the "cylinders 35 and 36 of each flux source adjusts or tunes the magnitude and direction of internal working field 51 within a predetermined range of values dependant on the magnetization of the cylinders" and in column 3, lines 59-column 4, "each flux source tunes or set the magnitude and direction of the internal working field 51 to a predetermined value within a predetermined range, wherein the range directly depends on the magnetization and rotatable position of each cylinder in each flux source." Applicant merely claims that the field is optimized at a selected direction at a selected point. Applicant has not precluded that regions surrounding the selected point may also have a controlled magnetic field. Applicant states that Leupold fails to teach any means to control the field property at the selected point. Leupold teaches that the magnetic field is tunable and adjustable, column 4, lines 17-30. Applicant has not claimed any specific design or arrangement to

control the magnetic field at the selected point. Applicant further argues that there is no teaching or suggestion of using a magnet to project a field into a patient to perform a medical procedure. Manwaring et al. discloses the use of a magnet to provide movement for a magnetically responsive element within a patient. Leupold discloses a permanent magnet structure able to provide a magnetic field at a specific point. Applicant has not claimed any specific control functions other than the magnetic field being at a selected point.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

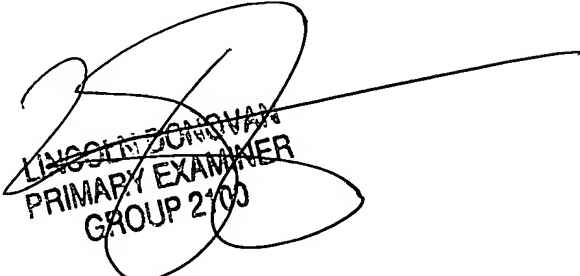
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is (571) 272-1988. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ldd


LINCOLN ZORN
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